

Instructor's Guide to Teaching SolidWorks Software Lesson 11

School's Name
Teacher's Name
Date

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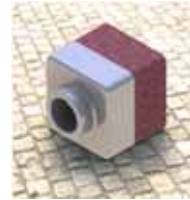


What is PhotoView 360?

A software application that creates realistic images from SolidWorks models.

- PhotoView 360 uses rendering effects such as:

- Materials
- Lights
- Shadows
- Backgrounds

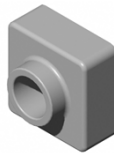


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Shaded Rendering

- The basis for images in PhotoView 360.
 - Shaded Rendering requires a material.
 - The default material is Plastic.
- To display the Shaded Rendering:
- Click **Render Tools > Render**.



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Materials

Materials specify the properties of a model's surface.
Properties are:

- Color
- Texture
- Surface Finish
- Illumination

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To Apply the Chromium Plate Material:

- Click **Render Tools > Edit Appearance**.
- Expand the metals folder.
- Open the sub-folder chrome.
- Select **chromium plate**.
- Click **OK** in the Appearances PropertyManager.
- Click **Final Render**.

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Appearance Editor

Chromium Plate

Old English Brick 2



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Image Background

The portion of the graphics area not covered by the model.


- Background styles vary in complexity and rendering speed.
- Background styles controlled by Scene Editor.
- Incorporate advanced rendering effects into a PhotoView 360 Scene.
 - Shadows
 - Reflections

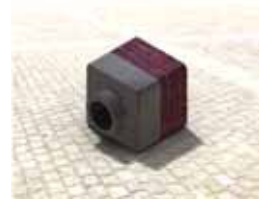


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To Change the Background Style:

1. Click Render Tools > Edit Scene .
2. Expand the *Presentation Scenes* folder.
3. Select Courtyard Background.
4. Click Apply.



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To Save the Image File

1. Click Render Tools > Final Render.
2. Click Save Image.
3. Enter a file name.
4. Specify a file type.



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SolidWorks MotionManager Application

What is SolidWorks MotionManager?

- SolidWorks MotionManager animates and captures motion of SolidWorks parts and assemblies.
- SolidWorks MotionManager generates Windows-based animations (*.avi files). The *.avi file uses a Windows-based Media Player.
- SolidWorks MotionManager can be combined with PhotoView 360.



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Renderer Options

The Renderer affects the quality of the saved image. There are two options:

- SolidWorks screen
- PhotoView 360 buffer



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Factors Affecting File Size



- Number of frames per second
- Renderer used
 - PhotoView 360 buffer creates a larger file than SolidWorks screen
- If using PhotoView 360 buffer:
 - Materials
 - Background
 - Shadows
 - Multiple-light sources
- Video compression
- Key frames

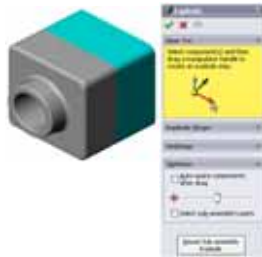


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To Create an Exploded View:

1. Click **Open** , and open the assembly, *Tutor*.
2. Click **Assembly > Exploded View** . The Explode PropertyManager appears.



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Creating an Exploded View:

3. Click on the component to explode to begin a new explode step. Drag the component to the explode location. The dialog box contains selection lists for:
 - Component(s) to explode
 - Direction to explode along
 - Distance

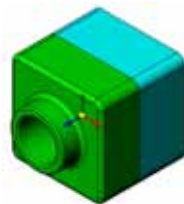


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Creating an Exploded View:


4. Click the component to explode, in this case *Tutor1*. The component name appears in the dialog. Select the desired explode direction from the model triad. This selection is indicated in the **Direction** area of the dialog (Along Z, Z@Tutor.SLDASM by default).

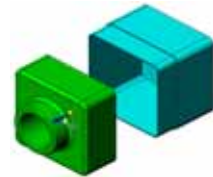


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Creating an Exploded View:

5. Drag the component to the desired distance. Release the mouse button to create the Explode step.
6. Edit the step (right-click on the new Explode step, and select **Edit Step**) to adjust the **Distance** to exactly 70mm and click **Apply** in the dialog.
7. Since there is only one component to explode, this completes making the exploded view. Click **OK**  to close the Explode PropertyManager.



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Creating an Exploded View:

8. Results.

Note: Exploded views are related to and stored in configurations. You can only have one exploded view per configuration.



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Collapsing an Exploded View:

- Right-click the assembly icon in the FeatureManager design tree, and select **Collapse** from the shortcut menu.

To Explode an Existing Exploded View:

- Right-click the assembly icon in the FeatureManager design tree, and select **Explode** from the shortcut menu.



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